ABSTRACT

A resin-metal composite layer is formed by modifying a surface of a resin substrate to a modified layer, contacting the modified layer with a metal compound solution, and adsorbing at least either metal colloids or ions are adsorbed to the polar group, so that metal particles are dispersed into the modified layer. Because of the fineness of the metal particles in the resin-metal composite layer, high transparent can be achieved. The resin-metal composite layer functions as a transparent conductive layer and the like.